

[54] URINARY INCONTINENCE PROSTHESES

[75] Inventors: David Annis, Bromborough;  
Malcolm C. Brown, Wirral; John R.  
Sutherst, Waterloo, all of England

[73] Assignee: National Research Development  
Corporation, London, England

[21] Appl. No.: 46,690

[22] Filed: May 7, 1987

[30] Foreign Application Priority Data

May 7, 1986 [GB] United Kingdom ..... 8611129

[51] Int. Cl.<sup>4</sup> ..... A61B 19/00

[52] U.S. Cl. .... 600/30; 128/DIG. 25

[58] Field of Search ..... 128/1 R, 630, DIG. 25,  
128/830, 834, 836, 837; 604/367, 368, 370;  
623/11, 12; 600/29, 30

[56] References Cited

U.S. PATENT DOCUMENTS

3,066,667	12/1962	Berry	128/DIG. 25
3,789,828	2/1974	Schulte	128/DIG. 25
3,862,452	1/1975	Wichterle et al.	623/12
4,019,498	4/1977	Hawtrey et al.	128/1 R
4,457,299	7/1984	Cornwell	128/DIG. 25
4,497,074	2/1985	Rey et al.	623/12
4,570,629	2/1986	Widra	604/368

4,615,704	10/1986	Frisch	128/1 R
4,636,213	1/1987	Pakiam	128/1 R
4,657,553	4/1987	Taylor	623/66

OTHER PUBLICATIONS

"Intermittent Occlusion System" Timm et al., IEEE  
Trans. Biomed. Engin. 1970.

Primary Examiner—Max Hindenburg  
Attorney, Agent, or Firm—Cushman, Darby & Cushman

[57] ABSTRACT

A prosthetic device (10) suitable for use in the treatment of stress incontinence in women by location as a cuff around the urethra, to elevate the bladder following prolapse, comprises a body (11) composed predominantly of a cross-linked synthetic polymer hydrogel having a water content of the order of 90%, and preferably about 95%, by weight. The hydrogel can be homogeneous through the body but in this event the body suitably has a local reinforcement (12), such as by embedded plastics material mesh, in at least one relatively small edge portion to enhance its tear resistance in relation to sutures (13) passed therethrough. The body is suitably of kidney shape having dimensional proportions of approximately 5×3×1. cms.

3 Claims, 1 Drawing Sheet

